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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,269	04/02/2004	Willi Leu	034183/275463	1791

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ALSTON & BIRD LLP  
BANK OF AMERICA PLAZA  
101 SOUTH TRYON STREET, SUITE 4000  
CHARLOTTE, NC 28280-4000

EXAMINER
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KOHNER, MATTHEW J

ART UNIT	PAPER NUMBER
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3653

DATE MAILED: 04/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/817,269	LEU, WILLI	
	Examiner	Art Unit	
	Matthew J Kohner	3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4/2/04</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

Examiner notes that Applicant indicated on the letter accompanying the IDS that an International Search Report was included. Examiner could not find a copy of the International Search Report. There was a translated copy of the International Preliminary Examination Report. However, if the Applicant wishes for Examiner to consider notations regarding each of the references listed on the International Search Report (as indicated in Applicant's letter accompanying the IDS), Applicant is requested to provide a copy of the Search Report with the response to this official action.

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the non-imbricated streams (claims 1 and 15) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the

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drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-20 contain the term "further processing." This term is unclear since a first processing step was not disclosed in the preceding claim language.

Claim 2 contains the limitation of controlling the conveying speed based on the number of products in the stack, the initial conveying speed and the length of the stack relative to the conveying direction. However, there is no recitation of the *steps* for determining any of these three criteria. For any of these criteria to be used in controlling the conveying speed, it would first have to be determined. Therefore, it is unclear how the method of the controlling the conveying speed actually functions.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-7, 11-12, 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,704,604 to Koelle et al in view of US Patent No. 4,127,262 to Eberle et al.

In regard to claims 1, 14, 15 and 19, Koelle discloses a method of processing sheet-like products comprising the steps of:

- conveying the products in a predetermined original order and in a continuous or interrupted imbricated stream (Col. 4, lines 57 *et seq.*), or in a non-imbricated stream, at an initial conveying speed,
- combining a plurality of the conveyed products which define a section of adjacent products, to form an intermediate stack (10),
- conveying the intermediate stack once it has been formed, and/or while it is being formed, such that a gap is formed in relation to subsequent products as seen in the conveying direction (Col. 4, lines 67 *et seq.*).

In regard to claims 1, 7 and 12, Koelle does not disclose further processing the products in the intermediate stack in a reverse order with respect to the predetermined original order. However, this is well known in the art. Eberle discloses destacking sheet-like products which are arranged in a stack. Further, Eberle discloses destacking the sheet-like products from below.

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This destacking arrangement, in combination with Koelle's teaching of stacking from below, would provide for products being in dispersed in reverse order. Further, there is motivation to combine the teachings of the two references. Koelle discloses that the stacks (10) are intended for a further processing step (Col. 5, lines 6 *et seq.*). Further, Eberle discloses that this particular destacking arrangement allows for the destacking speed to be increased (Col. 2, lines 22 *et seq.*).

In regard to claim 3, see Fig. 3.

In regard to claims 4 and 16, Koelle discloses a stop (11).

In regard to claim 5, see Fig. 3.

In regard to claim 6, see Col. 4, lines 66 *et seq.*

In regard to claim 11, Koelle doesn't specifically how many sheets are in a stack, but allowing 2-10 sheets would be obvious to one of ordinary skill in the art (See also Fig. 3).

In regard to claims 17 and 20, Koelle discloses a pushing element (6) which moves at a higher speed than the conveyor (19) (see Col. 6, lines 22 *et seq.*).

In regard to claim 18, see Fig. 3.

Claims 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Koelle in view of Eberle and further in view of US Patent No. 4,320,894 to Reist et al.

It is well known in the art that imbricated streams can be flipped (i.e. reoriented 180°) (see e.g. Reist or US Patent No. 5,733,099 Honneger). The motivation for reorienting is provided by Reist (See Col. 1, lines 15 *et seq.*). It would be obvious to one of ordinary skill in the art to modify the combination of references to add a reorienting apparatus in order to flip the imbricated stream before stacking.

Claims 1, 3-7, 11-12, 14-16 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over International Application Publication No. WO 93/15006 to Mehdahl et al. in view of US Patent No. 4,127,262 to Eberle et al.

In regard to claims 1, 14, 15 and 19, Mehdahl discloses a method of processing sheet-like products comprising the steps of:

- conveying the products in a predetermined original order and in a continuous or interrupted imbricated stream (See Fig. 2), or in a non-imbricated stream, at an initial conveying speed,
- combining a plurality of the conveyed products which define a section of adjacent products, to form an intermediate stack (2),
- conveying the intermediate stack once it has been formed, and/or while it is being formed, such that a gap is formed in relation to subsequent products as seen in the conveying direction (See Fig. 2).

In regard to claims 1, 7 and 12, Mehdahl does not disclose further processing the products in the intermediate stack in a reverse order with respect to the predetermined original order. However, this is well known in the art. Eberle discloses destacking sheet-like products which are arranged in a stack. Further, Eberle discloses destacking the sheet-like products from below. This destacking arrangement, in combination with Mehdahl's teaching of stacking from below, would provide for products being in dispersed in reverse order. Further, there is

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motivation to combine the teachings of the two references. Mehdahl discloses that the sheet-like products can be computer printouts, envelopes, mailers, etc. (Page. 1, lines 7 *et seq.*). All of these items will need to be unstacked in order to be used. Further, Eberle discloses that this particular destacking arrangement allows for the destacking speed to be increased (Col. 2, lines 22 *et seq.*).

In regard to claim 3, see Fig. 2.

In regard to claims 4 and 16 Mehdahl discloses a stop (Page 4, lines 9 *et seq.*).

In regard to claim 5, see Page 4, lines 9 *et seq.*

In regard to claim 6, see Page 5, lines 10 *et seq.*

In regard to claim 11, Mehdahl doesn't specifically how many sheets are in a stack, but allowing 2-10 sheets would be obvious to one of ordinary skill in the art (See also Fig. 2).

In regard to claim 18, see Fig. 2.

Claims 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Mehdahl in view of Eberle and further in view of US Patent No. 4,320,894 to Reist et al.

It is well known in the art that imbricated streams can be flipped (i.e. reoriented 180°) (see e.g. Reist or US Patent No. 5,733,099 to Honneger). The motivation for reorienting is provided by Reist (See Col. 1, lines 15 *et seq.*). It would be obvious to one of ordinary skill in the art to modify the combination of references to add a reorienting apparatus in order to flip the imbricated stream before stacking.



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Claims 1, 3-8, 11-12 and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,704,604 to Koelle et al in view of European Patent No. 526,677 to Corradi et al.

In regard to claims 1, 14, 15 and 19, Koelle discloses a method of processing sheet-like products comprising the steps of:

- conveying the products in a predetermined original order and in a continuous or interrupted imbricated stream (Col. 4, lines 57 *et seq.*), or in a non-imbricated stream, at an initial conveying speed,
- combining a plurality of the conveyed products which define a section of adjacent products, to form an intermediate stack (10),
- conveying the intermediate stack once it has been formed, and/or while it is being formed, such that a gap is formed in relation to subsequent products as seen in the conveying direction (Col. 4, lines 67 *et seq.*).

In regard to claims 1, 7 and 12, Koelle does not disclose further processing the products in the intermediate stack in a reverse order with respect to the predetermined original order. However, this is well known in the art. Corradi discloses destacking sheet-like products which are arranged in a stack. Further, Corradi discloses destacking the sheet-like products from below. This destacking arrangement, in combination with Koelle's teaching of stacking from below, would provide for products being in dispersed in reverse order. Further, there is motivation to combine the teachings of the two references. Koelle discloses that the stacks (10) are intended for a further processing step (Col. 5, lines 6 *et seq.*). Further, Corradi discloses a

particular destacking arrangement allows for the destacking to be performed efficiently in order for the sheet-like products to be further processed.

In regard to claim 3, see Fig. 3.

In regard to claims 4 and 16, Koelle discloses a stop (11).

In regard to claim 5, see Fig. 3.

In regard to claim 6, see Col. 4, lines 66 *et seq.*

In regard to claim 8, see Corradi, Fig. 2.

In regard to claim 11, Koelle doesn't specifically how many sheets are in a stack, but allowing 2-10 sheets would be obvious to one of ordinary skill in the art (See also Fig. 3).

In regard to claims 17 and 20, Koelle discloses a pushing element (6) which moves at a higher speed than the conveyor (19) (see Col. 6, lines 22 *et seq.*).

In regard to claim 18, see Fig. 3.

Claims 1, 3-8, 11-12, 14-16 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over International Application Publication No. WO 93/15006 to Mehdahl et al. in view of European Patent No. 526,677 to Corradi et al.

In regard to claims 1, 14, 15 and 19, Mehdahl discloses a method of processing sheet-like products comprising the steps of:

- conveying the products in a predetermined original order and in a continuous or interrupted imbricated stream (See Fig. 2), or in a non-imbricated stream, at an initial conveying speed,

- combining a plurality of the conveyed products which define a section of adjacent products, to form an intermediate stack (2),
- conveying the intermediate stack once it has been formed, and/or while it is being formed, such that a gap is formed in relation to subsequent products as seen in the conveying direction (See Fig. 2).

In regard to claims 1, 7 and 12, Mehdahl does not disclose further processing the products in the intermediate stack in a reverse order with respect to the predetermined original order. However, this is well known in the art. Corradi discloses destacking sheet-like products which are arranged in a stack. Further, Corradi discloses destacking the sheet-like products from below. This destacking arrangement, in combination with Mehdahl's teaching of stacking from below, would provide for products being in dispersed in reverse order. Further, there is motivation to combine the teachings of the two references. Mehdahl discloses that the sheet-like products can be computer printouts, envelopes, mailers, etc. (Page. 1, lines 7 *et seq.*). All of these items will need to be unstacked in order to be used. Further, Corradi discloses a particular destacking arrangement allows for the destacking to be performed efficiently in order for the sheet-like products to be further processed.

In regard to claim 3, see Fig. 2.

In regard to claims 4 and 16, Mehdahl discloses a stop (Page 4, lines 9 *et seq.*).

In regard to claim 5, see Page 4, lines 9 *et seq.*

In regard to claim 6, see Page 5, lines 10 *et seq.*

In regard to claim 8, see Corradi, Fig. 2.

In regard to claim 11, Mehdahl doesn't specifically how many sheets are in a stack, but allowing 2-10 sheets would be obvious to one of ordinary skill in the art (See also Fig. 2).

In regard to claim 18, see Fig. 2.

Claims 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,575,463 to Parkander in view of US Patent No. 5,228,373 to Welsch.

In regard to claims 13, Parkander discloses a method of processing sheet-like products comprising the steps of:

- conveying the products (3) in a predetermined original order and in a continuous or interrupted imbricated stream (See Fig. 3), or in a non-imbricated stream, at an initial conveying speed,
- combining a plurality of the conveyed products which define a section of adjacent products, to form an intermediate stack (6),
- conveying the intermediate stack once it has been formed, and/or while it is being formed, such that a gap is formed in relation to subsequent products as seen in the conveying direction (See Fig. 3).

In regard to claims 13, Parkander does not disclose further processing the products in the intermediate stack in a reverse order with respect to the predetermined original order. However, this is well known in the art (See e.g. Welsch or US Patent No. 5,725,209 to Takahashi et al). Welsch discloses destacking sheet-like products which are arranged in a stack. Further, Welsch discloses destacking the sheet-like products from above. This destacking arrangement, in combination with Parkander's teaching of stacking from above, would provide for products

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being in dispersed in reverse order. Further, there is motivation to combine the teachings of the two references. Parkander discloses that the sheets are to be removed (Col. 2, lines 55 *et seq.*). Further, Welsch discloses his particular destacking arrangement relates to the moving and transporting of stacks of paper.

Claims 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 4,296,684 to Wangermann in view of US Patent No. 5,228,373 to Welsch.

In regard to claims 13, Wangermann discloses a method of processing sheet-like products comprising the steps of:

- conveying the products in a predetermined original order and in a continuous or interrupted imbricated stream (See Fig. 2), or in a non-imbricated stream, at an initial conveying speed,
- combining a plurality of the conveyed products which define a section of adjacent products, to form an intermediate stack (S),
- conveying the intermediate stack once it has been formed, and/or while it is being formed, such that a gap is formed in relation to subsequent products as seen in the conveying direction (See Fig. 3).

In regard to claims 13, Wangermann does not disclose further processing the products in the intermediate stack in a reverse order with respect to the predetermined original order.

However, this is well known in the art (See e.g. Welsch or US Patent No. 5,725,209 to Takahashi et al). Welsch discloses destacking sheet-like products which are arranged in a stack. Further, Welsch discloses destacking the sheet-like products from above. This destacking arrangement,

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in combination with Wangermann's teaching of stacking from above, would provide for products being in dispersed in reverse order. Further, there is motivation to combine the teachings of the two references. Wangermann discloses that the sheets are to be removed (Col. 7, lines 17 *et seq.*). Further, Welsch discloses his particular destacking arrangement relates to the moving and transporting of stacks of paper.

#### ***Allowable Subject Matter***

Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims (provided, of course, that the 112 rejection is overcome).

#### ***Conclusion***

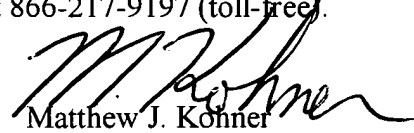
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Kohner whose telephone number is 703-305-8496. The examiner can normally be reached on Mon-Fri 9-5:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Walsh can be reached on 703-306-4173. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Matthew J. Kohner  
Examiner  
Art Unit 3653

mjk

  
DONALD P. WALSH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600